

STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

ILLINOIS INDEPENDENT TELEPHONE
ASSOCIATION)

Petition for initiation of an investigation of
the necessity of and the establishment of a
Universal Service Support Fund in accordance
with §13-301(d) of the Public Utilities Act)

Illinois Commerce Commission On Its Own)

Investigation into the necessity of and, if
appropriate, the establishment of a Universal
Support Fund pursuant to Section 13-301(d)
of the Public Utilities Act.)

Docket No. 00-0233

Docket No. 00-0335

CHIEF CLERK'S OFFICE
APR 20 3 13 PM '01
COMMUNICATIONS SECTION

DIRECT TESTIMONY

OF

GORDON J. KRAUT, JR.

ON BEHALF OF

GLASFORD TELEPHONE COMPANY

April 20, 2001

OFFICIAL FILE

ILL. C. C. DOCKET NO. 00-0233/0335
Glasford
Telephone Co. _____
Date 6-12-01 Reporter CB

1 **Q. Please state your name and business address.**

2 A. My name is Gordon J. Kraut, Jr. and my business address is 3220 Pleasant Run,
3 Springfield, Illinois 62707.

4 **Q. By whom are you employed?**

5 A. I am the consulting manager with GVNW Consulting, Inc. GVNW Consulting, Inc.'s
6 principal business is telecommunications consulting for small independent telephone
7 companies and we have provided consulting services to Glasford Telephone
8 Company for several years.

9 **Q. Please describe your educational background.**

10 A. I graduated from Edgewood College in May of 1988 with a Bachelor of Science
11 Degree in business with an emphasis in accounting. I earned a master's in business
12 administration from Edgewood College in 1991.

13 **Q. Please provide your background in telecommunications.**

14 A. In 1988 I began my telecommunications career with TDS, Inc. as an internal auditor.
15 In 1993 I was promoted to Senior Internal Auditor and in 1994 I was promoted to
16 Associate Manager of Accounting in TDS Telcom. Early in 1996 I was promoted to
17 the position of Manager of Revenue and Earnings in the Government and Regulatory
18 Affairs Group. I joined GVNW, Inc. on October 20, 1997 and in my current position
19 I consult with independent telephone companies and provide financial analysis and
20 management advice in the areas of concern to these companies.

21 **Q. On what company's behalf is this testimony submitted?**

22 A. This testimony is submitted on behalf of Glasford Telephone Company.

1 **Q. Have you prepared the Illinois Universal Service funding calculations for**
2 **Glasford Telephone Company using the format agreed to by the Staff and the**
3 **ITTA?**

4 A. Yes, I have. It is attached as Glasford Telephone Company Exhibit 1, Schedule 1.01
5 and consists of 3 pages.

6 **Q. Did you complete Glasford Telephone Company Exhibit 1, Schedule 1.01 in**
7 **accordance with the instructions and based on Glasford Telephone Company's**
8 **ICC Form 23A or other information filed with the Commission for the year**
9 **ended December 31, 2000?**

10 A. Glasford Telephone Company is a cooperative and, as such, is not required to file ICC
11 form 23A with the Commission. However Glasford Telephone Company Exhibit 1,
12 Schedule 1.01, was prepared from Glasford's trial balance for the year ended
13 December 31, 2000, prepared by the company's accounting firm.

14 **Q. Were these entries on Exhibit 1, Schedule 1.01 taken from books and records**
15 **kept by the company in the normal course of its business and recorded at the**
16 **time of the event?**

17 A. Yes.

18 **Q. Is Glasford Telephone Company Exhibit 1, Schedule 1.01 true and correct to the**
19 **best of your knowledge, information and belief?**

20 A. Yes it is.

1 **Q. Based on the responses and content of Glasford Telephone Company Exhibit 1,**
2 **Schedule 1.01, has Glasford Telephone Company provided Staff with certain**
3 **additional documents?**

4 A. Yes. I have provided the Staff with a copy of Glasford Telephone Company's
5 December 31, 2000, Trial Balance which we have requested be treated as confidential
6 and proprietary.

7 **Q. Have you provided the requisite information from Glasford Telephone Company**
8 **Exhibit 1, Schedule 1.01 to Mr. Schoonmaker for his use in compiling the**
9 **composite results for all companies seeking funding in connection with his**
10 **testimony?**

11 A. Yes, I have.

12 **Q. Does page 1 of Glasford Telephone Company Exhibit 1, Schedule 1.01 reflect any**
13 **adjustments being proposed by Glasford Telephone Company?**

14 A. Yes, a standard adjustment was made to line 1, net regulated plant. This adjustment is
15 summarized in Glasford Telephone Company Exhibit 1, Schedule 1.02. This
16 adjustment is standard adjustment #4 as listed in Bob Schoonmaker's testimony to
17 include the Extraordinary Plant Investment Changes. Glasford is putting in a fiber
18 ring to eliminate long lops and to enhance current and future service offerings and
19 quality to its customers. The project will cost \$120,000. This addition is above and
20 beyond any routine plant investments that the company is undertaking.

21 **Q. Does Glasford Telephone Company have a contract in place for this proposed**
22 **construction?**

23 A. Yes it does?

1 **Q. Please identify Glasford Telephone Company's Exhibit 1, Schedule 1.03.**

2 A. This is a true and accurate copy of the fiber ring contract between Glasford Telephone
3 Company and Midwest Cable Splicing, Inc. and it is signed by Glasford's manager, Stan
4 Brown.

5 **Q. Based on the format agreed to by the Staff and the IITA, what was Glasford**
6 **Telephone Company's rate of return for the calendar year 2000?**

7 A. 11.03%.

8 **Q. Does Glasford Telephone Company concur with Mr. Schoonmaker's recommen-**
9 **dation that its affordable rate be established at the current weighted average**
10 **rate for residential and business service?**

11 A. Yes.

12 **Q. Does that conclude your direct testimony on behalf of Glasford Telephone**
13 **Company?**

14 A. Yes it does.

Glasford Telephone Company

Illinois Universal Service Funding Calculation

Based upon ICC Form 23A Report Data for December 31, 2000

<u>Line #</u>	<u>Description</u>	<u>Source</u>	<u>Amount</u>	<u>Adjustment</u>	<u>Adjusted Amount</u>
1	Net Regulated Plant	Form 23A, P 8, Net Plant	\$ 1,060,439	\$ 120,000	\$ 1,180,439
2	Materials and Supplies Inventory	Page 2, 13-Month Average	9,593		9,593
3	Customer Deposits	Form 23A, P 8, 4040	12,730	-	12,730
4	ADIT - Regulated Plant	Form 23A, P 8, 4100 + 4340	-	-	-
5	Rate Base before Working Capital	line 1 + line 2 - line 3 - line 4			1,177,302
6	Working Capital Requirement				
7	Total Operating Expenses	Form 23A, P 14, Total	596,564	-	596,564
8	Less: Depreciation Expense	Form 23A, P 13, 6560	130,131	-	130,131
9	Total WC Operating Expense	line 7 - line 8	466,433	-	466,433
10	WC OE Requirement	line 9 * 45 / 360			58,304
11	Commission-Ordered Cash Balance Requirement		-	-	-
12	Total Working Capital Requirement	line 10 + line 11			58,304
13	Total Rate Base	line 5 + line 12			1,235,606
14	Total Operating Revenues	Form 23A, P 11, Total	748,392	-	748,392
15	Less: Illinois High Cost Fund		11,196	-	11,196
16	Net Operating Revenues	line 14 - line 15	737,196	-	737,196
17	Total Operating Expenses	Form 23A, P 14, Total	596,564	-	596,564
18	Other Operating Inc and Exp - Net	Form 23A, P 15, 7100	-	-	-
19	Other Operating Taxes	Form 23A, P 15, 7240	4,329	-	4,329
20	Net Op Inc before Income Taxes	line 16 - lines 17, 18, & 19	136,303	-	136,303
21	Income Tax Expense	line 34			-
22	Net Operating Income	line 20 - line 21			136,303
23	Return on Rate Base	line 22 / line 13			11.03%
24	After-tax Cost of Capital				12.60%
25	Target Net Operating Income	line 24 * line 13			155,686
26	Adj to Achieve Target Return on RB	line 25 - line 22			19,383
27	Gross Revenue Conversion Factor	line 35			1.0000
28	ROR Funding Deficiency Including Inc Taxes	line 26 * line 27			19,383
29	Calculation of Income Tax Expense				
30	Net Op Inc before Inc Taxes	line 20			136,303
31	Illinois Inc & Rep Tax Expense	line 30 * 7.18%			-
32	Net Op Inc before Fed Inc Tax	line 30 - line 31			136,303
33	Federal Income Tax Expense	line 32 * 34.00%			-
34	Total Imputed Income Tax Expense	line 31 + line 33			-
35	Gross Revenue Conversion Factor	1 / ((1 - .0718) * (1 - .34))			1.6324

Glasford Telephone Company
Illinois Universal Service Funding Calculation
Based upon ICC Form 23A Report Data for December 31, 2000
Material & Supplies Worksheet and Other Information

Line #

1	December-99	\$9,500
2	January-00	\$9,500
3	February-00	\$9,500
4	March-00	\$9,500
5	April-00	\$9,500
6	May-00	\$9,500
7	June-00	\$9,500
8	July-00	\$9,702
9	August-00	\$9,702
10	September-00	\$9,702
11	October-00	\$9,702
12	November-00	\$9,702
13	December-00	\$9,702
14	13 Month Average	\$9,593

Sale/Lease Back Arrangement

☒
☐

The company does not have any sale(s)/lease back arrangement.
The company does have sale(s)/lease back arrangement and has provided additional information to staff.

Lease Agreement with Affiliates

☒
☐

The company does not have any lease agreements with affiliates.
The company does have lease agreements with affiliates and has provided additional information to staff.

Trial Balances

The Company has provided a copy of its 12/31/2000 trial balance in support of the attached exhibits.

Glasford Telephone Company
 Illinois Universal Service Funding Calculation
 Based upon ICC Form 23A Report Data for December 31, 2000
 Operating Revenues By Category

<u>Line #</u>		<u>Source</u>	<u>Amount</u>
		Form 23A, P 10, Total Local	
1	Local Revenues	Network Service Revenues	\$ 124,235
2	State Subscriber Line Charges	Trial Balance 12/31/00	
3	State Access Revenues	Trial Balance 12/31/00	\$ 213,540
4	State High Cost Support	Exhibit X, Line 15	\$ 11,196
5	State Special Access Revenues	Trial Balance 12/31/00	\$ -
6	Total State Access & Local Revenues	Sum (Ln 1 - 5)	\$ 348,971
7	Federal Subscriber Lines Charges	Trial Balance 12/31/00	\$ 61,840
8	Federal Access Revenues	Trial Balance 12/31/00	\$ 226,449
9	Federal High Cost Support	Trial Balance 12/31/00	\$ 78,681
10	Federal Special Access Revenues	Trial Balance 12/31/00	\$ -
11	Total Federal Access Revenues	Sum (Ln 7 - 10)	\$ 366,970
12	Misc Revenues	Trial Balance 12/31/00	\$ 32,451
13	Total Operating Revenues	Ln 6 + Ln 11 + Ln 12	<u>\$ 748,392</u>

Glasford Telephone Company
Summary of Adjustments

Adjustment 4	Dr.	Cr.
--------------	-----	-----

Net Plant in Service		120,000
----------------------	--	---------

To record entry for completion of Fiber Ring.

Miscellaneous Construction Work and Maintenance Services Contract

Contract Form 773NRUS
June 1998

Telephone Company: Glasford Telephone Company
Telephone Company Designation: IL647
Contractor: Midwest Cable Splicing, Inc.
Contract No.: 2001-01
Contract Date: February 13, 2001
Contract Amount: \$ 120,000

**MISCELLANEOUS CONSTRUCTION WORK
AND MAINTENANCE SERVICES CONTRACT****SECTION I**W.O. Number 2001-01 (Enter this number on all attachments, invoices and related correspondence.)This Contract is entered into this 13th day of February, 2001 between _____Midwest Cable Splicing, Inc(Hereinafter called "Contractor"). (Contractors' License No.) N/AIssuance State N/A Expiration Date N/Aof, 1828 County Road 330, P. O. Box 285
(Mailing Address)Jackson : Missouri 63755-0285
(City) (State) (Zip)and, Glasford Telephone Company
(Hereinafter called "Owner").**PROJECT**

1. Description of work:
Provide construction for a fiber cable to link future node sites into a ring configuration.

(Hereinafter called the "Project").Indicate if drawings, specifications, or other further description is attached and made part of this agreement:
(Check One) NO X YES _____ (See Attachment A.)

2. Project is for: (Check One) Construction X Maintenance _____
3. Evidence of insurance is required (See Section III).
4. The Owner will furnish material? (Check One) NO _____ YES X (See Attachment C and D)
5. All work on this Contract will be performed in the Owner's exchange(s) of Glasford
located in Peoria County Illinois

6. The method of payment for performance shall be:
(Specify rate[s])

Hourly basis _____

Lump-Sum (Explain as necessary) _____

Unit basis (Describe unit[s]) Labor Only for the following units: BA, BD, BFC, BFO, INNERDUCT, BM, HBFO, HC, HO, UH, W and XX.

NO PAYMENT SHALL BE DUE UNDER THIS AGREEMENT WHILE THE CONTRACTOR IS IN DEFAULT OF ANY PROVISION HEREOF.

7. The maximum amount of this Contract shall be \$ 120,000. Payment shall be due and payable in accordance with the following schedule:

By weekly tab sheets submitted and invoicing prepared for payments due within 30 days of receipt.

A 10% retainage will be held until final inspection and cleanup are satisfactory to the Owner.

Invoices are to be submitted to:

Michael S. Freeman
C/o Communications Engineers, Inc.
3015 Stanton Ave.
Springfield, IL 62703

A DULY EXECUTED FORM 743NRUS, CERTIFICATE OF CONTRACTOR AND INDEMNITY AGREEMENT, SHALL ACCOMPANY THE FINAL INVOICE. (A COPY IS ATTACHED AND TO BE REMOVED FROM CONTRACT AND RETAINED FOR SUBMISSION WITH FINAL INVOICE.)

8. The Contractor shall begin performance of this Contract no later than June 4, 2001 and shall complete performance no later than July 20, 2001 which totals 34 construction days excluding Saturdays, Sundays, holidays and automatic time extensions for bad weather days.
9. A time extension will be granted for delays beyond the control of the contractor. The contractor must request the time extension in writing within two weeks of the event that causes the delay.
10. Liquidated damages in the amount of Five hundred dollars (\$500.00) per day for time extending beyond the completion date, including approved time extensions, will be deducted from any moneys due the contractor for final payment.

SECTION II - GENERAL PROVISIONS

1. **Notification of Injury or Damage:** The Contractor shall promptly notify the Owner of any injury, death, loss or damage to persons, s, or property which is in any way related to the work performed under this Contract, even though such occurrence was not caused or contributed to by the Contractor or the contractor's employees and agents.
2. **Withholding Of Payments:** The Owner may withhold money due for portions of the Project which have been rejected by the Owner and which have not been corrected by the Contractor to the satisfaction of the Owner. The Contractor shall pay each material supplier, if any, within five (5) days after receipt of any payment from the Owner, the amount thereof allowed on account of materials furnished by each material supplier. The Owner may withhold money due for claims, which might be the subject of reimbursement to the Owner by the Contractor. If the Owner is advised that the Contractor is not promptly paying material suppliers as set out above, or if the Owner is advised that employees of the Contractor are not being promptly paid, then the Owner may withhold such money due as the Owner deems sufficient to insure the obligations incurred by the Contractor in connection with the work covered by this Contract will be paid in full.
3. **Changes in Project:** The Owner may make changes in the Project by altering, adding to or deducting from the Project. No change in the Contract price shall be made for minor changes not involving extra cost. All adjustments in the Contract price by reason of any other change shall be agreed to by the parties prior to commencement of the actual work in connection with such change.
4. **Standards of Work:** All work performed under this Contract shall conform to applicable current Rural Utilities Service (hereinafter called "RUS") standards and specifications. (See Attachment B, Attachment F and Specific construction drawings included in Attachment H.)

The Contractor shall furnish and be responsible for all supervision; labor, tools, equipment, power, transportation, material, and supplies required to perform the work, except those items specifically listed which the owner will furnish. The Contractor shall pickup and transport such material and equipment from its place of storage to the job site as needed. The Contractor shall transport and return to a place of storage designated by the Owner unused material and equipment belonging to the Owner.

5. **Provisions of Materials:** In the performance of this Contract there shall be used only such unmanufactured articles, materials and supplies as have been specified by the owner (See Attachment D) or are listed in the current RUS Publication 344-2 List of Materials Acceptable for Use on Telecommunications Systems of RUS Borrowers. The Contractor agrees to submit to the Owner such certificate or certificates, signed by the Contractor with respect to compliance with the foregoing provisions as requested by the owner.

The Contractor shall purchase materials and supplies outright and not subject to any conditional sales agreement, bailment lease, or other agreement reserving to the seller any right, title or interest therein.

All guarantees of materials and workmanship running in favor of the Contractor shall be transferred to the Owner on completion of construction and at such time as the Contractor receives final payment.

The Contractor shall save harmless and indemnify the Owner from any and all claims, suits, and proceedings for the infringement of any patent or patents covering any materials or equipment provided by the Contractor used in construction of the Project.

It shall be the duty of the Contractor to inspect all materials used in the performance of the work, whether or not furnished by the Owner. The Contractor shall not use any defective material in the performance of work.

The Contractor shall reimburse the Owner or shall replace at no cost to the Owner any material or property destroyed, or lost, regardless of cause, in the performance of the Contract.

6. **Laws and Regulations:** The Contractor shall comply with all Federal, State, and Municipal Laws, ordinances and regulations and building and construction codes applicable to the performance of the work and give all notices that may be required. If the Contractor observes that the work to be performed is at variance with any law, ordinance, or regulation or building or construction code, he shall promptly notify the Owner. The Contractor shall follow the instructions of Government officials regarding maintenance of traffic and protection of the public. The Contractor shall obtain a copy of regulations or permit requirements of the appropriate Road authorities and make all employees aware of these regulations.
7. **Environmental Protection:** The Contractor shall perform work in such a manner as to maximize preservation of beauty and conservation of natural resources, and minimize marring and scarring of the landscape and silting of streams. The Contractor shall not deposit trash in streams or waterways, and shall not deposit herbicides or other chemicals or their containers in or near streams, waterways or pastures. The Contractor shall follow, under the general direction of the Owner, the criteria relating to environmental protection as specified herein by the Owner.
8. **Inspection of Work:** The Owner may maintain inspectors at the job site, and to further assure compliance with the plans and specifications and maintain quality of construction, may, after reasonable notice to the Contractor, perform from time to time operational tests on the Project of a portion or portions thereof selected by the Owner. However, such inspectors or other employees or agents of the Owner shall not have authority to direct or advise the Contractor or his employees and agents concerning the method or manner by which the work is to be performed. The Contractor has sole authority, responsibility, and control over the method and manner by which the work is to be performed and shall remain in all respects an independent contractor.
9. **Service Pipes and Underground Structures:** The Contractor at the Contractor's expense shall locate any pipes, conduits or other underground structures or obstructions, including telephone facilities, which are in the way of the construction, whether or not any work plans omit to show or purport to show their locations. All such property damaged in the course of the work shall be repaired by the Contractor in a manner satisfactory to the Owner. The contractor shall utilize the services of the state locator service if it is available.
10. **Duty Of Safe Performance:** The Contractor shall at all times take all reasonable precautions to protect all persons and property, including property of the Owner from injury arising out of the performance of the work. The Contractor shall make such inspections, safety checks, and tests, and shall provide such equipment, personnel, and supervision as is necessary to insure the safe performance of the work.
11. **Defects in Work:** The Contractor shall correct at its expense all defects and deficiencies in the work which result from labor or material furnished by the Contractor, workmanship, or failure to follow plans, drawings, or other specifications made a part of this Contract which are discovered within one (1) year from the date the work is accepted. Acceptance of the work by the Owner shall not constitute a waiver or any such defects or deficiencies. The Owner shall notify the Contractor in writing of any defects and deficiencies and if the Contractor has failed to remedy or make arrangements satisfactory to the Owner to remedy such defects and deficiencies within twenty (20) days thereafter, the Owner may remedy such defects and deficiencies and the Contractor shall pay the Owner the cost of making such corrections.
12. **Completion on Contractor's Default:** If default shall be made by the Contractor in the performance of any of the terms of this Contract, the Owner, without in any manner limiting its legal and equitable remedies in the circumstances, may serve upon the Contractor a written notice requiring the Contractor to cause such default to be corrected forthwith. Unless within twenty (20) days after the service of such notice upon the Contractor such defaults shall be corrected or arrangements for the correction thereof satisfactory to the Owner shall be made by the Contractor, the Owner may take over the construction of the Project and prosecute the same to completion by contract or otherwise for the account and at the expense of the Contractor, and the Contractor

shall be liable to the Owner for any cost or expense in the excess of the Contract price occasioned thereby. In such event the Owner may take possession of and utilize, in completing the construction of the Project, any materials, tools, supplies, equipment, appliances, and plant belonging to the Contractor which may be situated at the site on the Project. The Owner in such contingency may exercise any rights, claims, or demands which the Contractor may have against third persons in connection with this Contract and for such purpose the Contractor does hereby assign, transfer, and set over unto the Owner all such rights, claims, and demands.

13. **Indemnification:** The Contractor agrees to indemnify and hold harmless the Owner from any and all claims, actions, or causes of action to the extent the claimed loss or damage arises out of the Contractor's negligent performance or nonperformance of work herein contracted to be done whether such claims, actions, or causes of action are alleged to be the results of any act or omission of the Contractor, agents, servants, employees, or any or all of them and regardless of the fact that the work may have been completed and accepted by the Owner and regardless of the fact the Contractor may have received payment for work. The Owner shall promptly notify the Contractor in writing of any such claims, actions, or causes of action and give the Contractor full opportunity and authority to assume the sole defense and settlement thereof. The Owner shall furnish to the Contractor upon request all information available to the Owner for defense against any claim, action, or cause of action. The Contractor's liability under this indemnity shall not exceed the value of the Contract except for those claims involving personal injury or tangible property damage.
14. **Miscellaneous:** The Contractor has made a careful examination of the site of the Project and conditions, which may affect work under this Contract.

The Contractor will build the outside plant facilities under the Contract on right-of-Way provided by the Owner including, where directed by the Owner, right-of-Way presently occupied by existing facilities of the Owner. The Contractor will use no explosive in the performance of work under this Contract without the prior written approval of the Owner. All permits necessary for the handling or use of dynamite or other explosives in connection with construction of the Project shall be obtained by and at the expense of the Contractor.

Except as otherwise agreed to by the Owner, all work shall be performed without interruption to or interference with existing telephone service.

The Contractor shall not assign this contract or any part thereof, or enter into any contract with any person, firm or corporation for performance of the Contractor's obligations hereunder, or any part of such obligations.

Note: The penalty for making false statements in offers is prescribed in 10 U.S.C. 1001.

SECTION III - INSURANCE AND BONDS

During the Contractor's performance hereunder, the Contractor shall take out and maintain fully paid insurance and bonds as follows:

INSURANCE REQUIREMENTS

- (a) Workers' compensation and employer liability insurance, as required by law, covering all their employees whom perform any of the obligations of the contractor under the contract. If any employer or employee is not subject to the workers' compensation laws of the governing state, then insurance shall be obtained voluntarily to extend to the employer and employee coverage to the same extent as though the employer or employee were subject to the workers' compensation laws.
- (b) Public liability insurance covering all operations under the contract shall have limits for bodily injury or death of not less than \$1 million each occurrence, limits for property damage of not less than \$1 million each occurrence, and \$1 million aggregate for accidents during the policy period. A single limit of \$1 million of bodily injury and property damage is acceptable. This required insurance may be in a policy or policies of insurance, primary and excess including the umbrella or catastrophe form.
- (c) Automobile liability insurance on all motor vehicles used in connection with the contract, whether owned, nonowned, or hired, shall have limits for bodily injury or death of not less than \$1 million per person and \$1 million per occurrence, and property damage limits of \$1 million for each occurrence. This required insurance may be in a policy or policies of insurance, primary and excess including the umbrella or catastrophe form.
- (d) Owners and Contractors Protective Liability Insurance.

The Owner may at any time require public liability insurance and property damage liability insurance greater than the above. In any such event, the additional premium payable solely as the result of such additional insurance shall be added to the contract price.

Where the performance of the work involves "structural property, underground property, or blasting," the Contractor's comprehensive general liability insurance policy shall provide coverage to the insured for legal liability arising from operations under this contract for property damage (1) arising out of blasting, (2) arising out of collapse of or structural injury to any building or structure, or (3) to underground facilities and utilities.

BOND REQUIREMENTS

Construction contracts for facilities in amounts in excess of \$100,000 shall require contractors to secure a contractors' bond in a penal sum of not less than the contract price, which is the sum of all labor and materials including owner-furnished materials installed for the project. On line extension contracts under which work will be done in sections and no section will exceed a total cost of \$ 100,000, the borrower may waive the requirement for a contractors' bond.

I have read, understand, and agree to all portions of this Contact.

Midwest Cable Splicing, Inc.

(Contractor)

By

Norbert L. Henninger

(Norbert L. Henninger)

Title

President

Date

2/02/01

Glasford Telephone Company

(Owner)

By

Stan W. Brown

Title

Manager

Date

2-6-2001

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0572-0107. The time required to complete this information collection is estimated to average .05 of an hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

U.S. Department of Agriculture
Rural Utilities Service

BD 7900597720

CONTRACTOR'S BOND

1. Know all men that we, Midwest Cable Splicing, Inc. as
Principal, Nationwide Mutual Insurance Company, as Surety and

are held and firmly bound unto Glasford Telephone Company
(hereinafter called the "Owner") and unto the United States of America (hereinafter called the "Government")
and unto all persons, firms and corporations who or which may furnish materials for or perform labor on a
Rural Utilities Service Project known as Project

IL 647 2001-01 and to their successors
and assigns, in the penal sum of One Hundred Twenty thousand and no/100

dollars (\$ 120,000.00),
as hereinafter set forth and for the payment of which sum well and truly to be made we bind ourselves, our
executors, administrators, successors and assigns jointly and severally by these presents. Said Project is
described in a certain construction contract (hereinafter called the "Construction Contract") between the
Owner and the Principal,

dated JANUARY 30, 2001, pursuant and subject to a certain loan
contract (hereinafter called the "Loan Contract") between the Owner and the Government, acting through the
Administrator of the Rural Utilities Service (hereinafter called the "Administrator").

2. The condition of this obligation is such that if the Principal shall well and truly perform and fulfill all the
undertakings, covenants, terms, conditions and agreements of the Construction Contract and any amendments
thereto, whether such amendments are for additions, decreases, or changes in materials, their quantity, kind
or price, labor costs, mileage, routing or any other purpose whatsoever, and whether such amendments are
made with or without notice to the Surety, and shall fully indemnify and save harmless the Owner and the
Government from all costs and damages which they, or either of them, shall suffer or incur by reason of any
failure so to do, and shall fully reimburse and repay the Owner and the Government for all outlay and
expense which they, or either of them shall incur in making good any such failure of performance on the part
of the Principal, and shall promptly make payment to all persons working on or supplying labor or materials
for use in the construction of the Project contemplated in the Construction Contract and any amendments
thereto, in respect of such labor or materials furnished and used therein, to the full extent thereof, and in
respect of such labor or materials furnished but not so used, to the extent of the quantities estimated in the
Construction Contract and any amendments thereto to be required for the construction of the Project, and
shall well and truly reimburse the Owner and the Government, as their respective interests may appear, for
any excess in cost of construction of said Project over the cost of such construction as provided in the
Construction Contract and any amendments thereto, occasioned by any default of the Principal under the
Construction Contract and any amendments thereto, then this obligation shall be null and void, but otherwise
shall remain in full force and effect.
3. It is expressly agreed that this bond shall be deemed amended automatically and immediately, without formal
and separate amendments hereto, upon any amendment to the Construction Contract, so as to bind the
Principal and the Surety to the full and faithful performance of the Construction Contract as so amended,
provided only that the total amount of all increases in the cost of construction shall not exceed 20 percent of
the amount of the maximum price set forth in the Construction Contract. The term "Amendment," wherever
used in this bond, and whether referring to this bond, the Construction Contract or the Loan Contract shall
include any alteration, addition, extension, modification, amendment, rescission, waiver, release or
annulment, of any character whatsoever.

U.S. Department of Agriculture
Rural Utilities Service

4. It is expressly agreed that any amendment which may be made by agreement or otherwise between the Principal and the Owner in the terms, provisions, covenants and conditions of the Construction Contract, or in the terms, provisions, covenants and conditions of the Loan Contract (including, without limitation, the granting by the Administrator to the Owner of any extension of time for the performance of the obligations of the Owner under the Loan Contract or the granting by the Administrator or the Owner to the Principal of any extension of time for the performance of the obligations of the Principal under the Construction Contract, or the failure or refusal of the Administrator or the Owner to take any action, proceeding or step to enforce any remedy or exercise any right under either the Construction Contract or the Loan Contract, or the taking of any action, proceeding or step by the Administrator or the owner, acting in good faith upon the belief that the same is permitted by the provisions of the Construction Contract or the Loan Contract) shall not in any way release the Principal and the Surety, or either of them or their respective executors, administrators, successors or assigns, from liability hereunder. The Surety hereby acknowledges receipt of notice of any amendment, indulgence or forbearance, made, granted or permitted.
5. This bond is made for the benefit of all persons, firms and corporations who or which may furnish any materials or perform any labor for or on account of the construction to be performed under the Construction Contract and any amendments thereto, and they, and each of them, are hereby made obligees hereunder with the same force and effect as if their names were written herein as such, and they and each of them may sue hereon.

In witness whereof, the undersigned have caused this instrument to be executed and their respective corporate seals to be affixed and attested by their duly authorized representatives this 30th

day of January, 20 01

Midwest Cable Splicing Inc. (SEAL)
(PRINCIPAL)

Attest:

Benny R. Muen
(SECRETARY)

By Robert L. Pennington

Nationwide Mutual Insurance Co.
(SURETY)

Attest:

✓ By BS Johnson

Attorney in fact

(SECRETARY)

701 5th Ave Des Moines, Iowa
(ADDRESS OF SURETY'S HOME OFFICE) 50391

By _____

(RESIDENT AGENT OF SURETY)

Signatures: The Contractor's Bond must be signed with the full name of the Contractor. If the Contractor is a partnership the Contractor's Bond must be signed in the partnership name by a partner. If the Contractor is a corporation the Contractor's Bond must be signed in the corporate name by a duly authorized officer and the corporate seal affixed and attested by the Secretary of the corporation. A typewritten copy of all such names and signatures shall be appended.

Power of Attorney: The Contractor's Bond must be accompanied by a power of attorney authorizing execution on behalf of the Surety and, in jurisdictions so requiring should be countersigned by a duly authorized resident agent of the Surety.



147323

Power of Attorney

KNOW ALL MEN BY THESE PRESENTS THAT Nationwide Mutual Insurance Company, a corporation organized under the laws of the State of Ohio, with its principal office in the City of Columbus, Ohio, hereinafter called "Company", does hereby make, constitute and appoint **BRADLEY S. JOHNSON** **KENNETH L. JOHNSON**
LINDA M. JOHNSTON **KENNETH A. MINNER**

CPE GIRARDEAU MO

each in their individual capacity, its true and lawful Attorney-In-Fact with full power and authority to sign, seal, and execute in its behalf any and all bonds and undertakings and other obligatory instruments of similar nature in penalties not exceeding the sum of **FIVE HUNDRED THOUSAND AND NO/100 DOLLARS** \$ 500,000.00 and to bind the Company thereby, as fully and to the same extent as if such instruments were signed by the duly authorized officers of the Company; and all acts of said Attorney pursuant to the authority hereby given are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the Board of Directors of the Company.

"RESOLVED, that the President, or any Senior Vice President, Resident Vice President or Second Vice President by, and the same hereby is, authorized and empowered to appoint Attorneys-In-Fact of the Company and to authorized them to execute any and all bonds, undertakings, recognizances, contracts of indemnity, policies, contracts guaranteeing the fidelity of persons holding positions of public or private trust, and other writings obligatory in nature which the business of the Company may require; and to modify or revoke, with or without cause, any such appointment or authority. The authority granted hereby shall in no way limit the authority of other duly authorized agents to sign and countersign any of said documents on behalf of the Company."

"RESOLVED FURTHER, that such Attorneys-In-Fact shall have full power and authority to execute and deliver any and all such documents and to bind the Company, subject to the terms and limitations of the power of attorney issued to them, and to affix the seal of the Company thereto, provided, however, that said seal shall not be necessary for the validity of any such documents."

This Power of Attorney is signed and sealed by facsimile under and by the following By-Laws duly adopted by the Board of Directors of the Company.

ARTICLE VIII

"Section 10. Execution of instruments . Any Vice President and any Assistant Secretary or Assistant Treasurer shall have the power and authority to sign or attest all approved documents, instruments, contracts or other papers in connection with the operation of the business of the company in addition to the Chairman and Chief Executive Officer, President, Treasurer and Secretary; provided, however, the signature of any of them may be printed, engraved or stamped on any approved document, contract, instrument or other papers of the Company."

IN WITNESS WHEREOF, the said Nationwide Mutual Insurance Company has caused this instrument to be sealed and duly attested by the signature of its Vice President the 28th day of April, 1999.

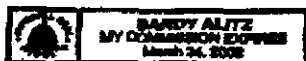
ACKNOWLEDGMENT

STATE OF IOWA
 COUNTY OF POLK SS



By: *Douglas L. Andersen*
 Vice President

On this 28th day of April, 1999, before me came the above named Vice President for Nationwide Mutual Insurance Company, to me personally known to be the officer described in and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, deposes and says, that he is the officer of the Company aforesaid, that the seal affixed thereto is the corporate seal of said Company, and the said corporate seal and his signature were duly affixed and subscribed to said instrument by the authority and direction of said Company.



Sandy Alitz

Notary Public
 My Commission expires March 24, 2002

CERTIFICATE

I, John F. Delaloye, Assistant Secretary of Nationwide Mutual Insurance Company, do hereby certify that the Resolution included herein is a true and correct transcript from the minutes of the meeting of the Board of Directors duly called and held on the 6th day of September, 1967, and the same has not been revoked or amended in any manner; that said Douglas L. Andersen was on the date of the execution of the foregoing Power of Attorney the duly elected Vice President of Nationwide Mutual Insurance Company and the corporate seal and his signature as Vice President were duly affixed and subscribed to the said instrument by the authority of said Board of Directors.

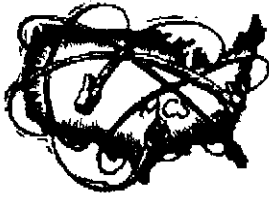
IN WITNESS WHEREOF, I have hereunto subscribed my name as Assistant Secretary, and affixed the corporate seal of said Company this 30 day of January, 2001

20328

This Power of Attorney expires



John F. Delaloye
 Assistant Secretary

**MIDWEST CABLE SPLICING, INC.**

P O BOX 285

JACKSON MO 63755-0285

(573) 243-3532 FAX (573) 243-0644

Glasford Telephone Company.

P. O. Box 169

Glasford, IL 61533-0169

Attn: Mr. Stan Brown

Dear Sir:

The following individuals are authorized to sign all legal documents and contracts on behalf of the corporation.

Norbert L. Nenninger, President

Michael H. Nenninger, Vice President

Benny R. Myers, Secretary

Sincerely,

MIDWEST CABLE SPLICING, INC.

Norbert L. Nenninger
President

NLN:ew

ACORD CERTIFICATE OF LIABILITY INSURANCEDATE (MM/DD/YY)
12/14/2000

PRODUCER (573)334-8100 FAX (573)334-4877
 Johnson Insurance Group, Inc.
 6 N. Clark Street
 Cape Girardeau, MO 63701

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION
 ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE
 HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR
 ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURERS AFFORDING COVERAGE

INSURED Midwest Cable Splicing Inc
 PO Box 285
 Jackson, MO 63755

INSURER A: **Allied Group**

INSURER B:

INSURER C:

INSURER D:

INSURER E:

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS
A	GENERAL LIABILITY	ACP GLP 7100306539	01/01/2001	01/01/2002	EACH OCCURRENCE \$ 1,000,000
	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY				FIRE DAMAGE (Any one fire) \$ 50,000
	<input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR				MED EXP (Any one person) \$ 5,000
					PERSONAL & ADV INJURY \$ 1,000,000
					GENERAL AGGREGATE \$ 2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:				PRODUCTS - COMP/OP AGG \$ 2,000,000
	<input type="checkbox"/> POLICY <input type="checkbox"/> PRO- JECT <input type="checkbox"/> LOC				
A	AUTOMOBILE LIABILITY	ACP BA 7100306539	01/01/2001	01/01/2002	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
	<input checked="" type="checkbox"/> ANY AUTO				BODILY INJURY (Per person) \$
	<input type="checkbox"/> ALL OWNED AUTOS				BODILY INJURY (Per accident) \$
	<input type="checkbox"/> SCHEDULED AUTOS				PROPERTY DAMAGE (Per accident) \$
	<input type="checkbox"/> HIRED AUTOS				
	<input type="checkbox"/> NON-OWNED AUTOS				
A	GARAGE LIABILITY				AUTO ONLY - EA ACCIDENT \$
	<input type="checkbox"/> ANY AUTO				OTHER THAN EA ACC \$
					AUTO ONLY: AGG \$
A	EXCESS LIABILITY	ACP CA 7100306539	01/01/2001	01/01/2002	EACH OCCURRENCE \$ 1,000,000
	<input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE				AGGREGATE \$ 1,000,000
	<input type="checkbox"/> DEDUCTIBLE				\$
	<input type="checkbox"/> RETENTION \$				\$
					\$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	ACP WCD 71 0 0306539	01/01/2001	01/01/2002	WC STATU- TORY LIMITS <input type="checkbox"/> OTH- ER <input type="checkbox"/>
					E.L. EACH ACCIDENT \$ 500,000
					E.L. DISEASE - EA EMPLOYEE \$ 500,000
					E.L. DISEASE - POLICY LIMIT \$ 500,000
	OTHER				

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS

CERTIFICATE HOLDER**ADDITIONAL INSURED; INSURER LETTER****CANCELLATION**

Glasford Telephone Co
 Attention: Stan Brown
 PO Box 169
 Glasford, IL 61533-0169

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE
 EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL
10 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT,
 BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY
 OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE *Bradley Johnson*
 Bradley Johnson

ATTACHMENT I

[illegible]

* Item corresponds with item in list of materials in construction drawings.

LIST OF ATTACHMENTS

- A. Project Description**
- B. Contract Specifications**
- C. Owner Furnished Materials**
- D. Owner Specified Materials to be Furnished by the Contractor**
- E. Summary of Construction Units**
- F. Bidder Instruction Modifications**
- G. Special Rearrangement Units**
- H. Special Assembly Unit Drawings and Guide Drawings**
- I. List of Owner's Material on Hand (including quantities and pricing)**
- J. Schedule of Acceptance Tests and Measurements**
- K. Construction Drawings**

ATTACHMENT A**PROJECT DESCRIPTION**

This construction project consists of the following outside plant activity:

Construction of a 24fiber optic cable, pulled inside a 1½" innerduct that is to be placed by directional boring and/or plowing. A 6,000 foot section 25 pair copper cable is to be placed dual with the innerduct.

The 1½" innerduct will be placed at a depth of 42", while boring of the innerduct will be depth plus 12" under roads, driveways, creeks, etc.

Any sheath faults or deficiencies in material or workmanship found during the splicing operation will be the responsibility of the Contractor that provided construction under this contract to remedy.

The Owner and/or his representative shall inspect and/or observe the following:

- 1) Trenches before back filling.
- 2) All cable damage before repair.

Any cable damaged by the Contractor shall be replaced, at his expense, within 5 working days unless the Owner approves additional delay.

All Public and Private Right-of-Ways are to be considered "Reduced and Restricted Construction Corridor". Cables placed on State Right-of-Way are required to be within eight (8) feet of the Right-of-Way line and in accordance with the appropriate State Highway Permits.

The Owner has obtained applicable State, Railroad, Township, County, and any required private right-of-way. Construction must conform to any of the easement requirements mentioned.

Foreign utilities, such as water, gas, electric, sewer, telephone cables are not shown on any construction sheets and will be the responsibility of the Contractor to arrange to have located.

ATTACHMENT B**CONTRACT SPECIFICATIONS**

The construction to be performed under this contract is not to be financed with RUS funds.

The unit descriptions and construction procedures are to conform to RUS specifications and standards for the convenience of the owner.

The following RUS specifications and drawings will become a part of this contract by reference:

☒ RUS Form 515a - Specifications and Drawings for Construction of Direct Buried Plant. (RUS Bulletin 345-150)

Dated: 5-89

☐ RUS Form 515c - Specifications and Drawings for Conduit and Manhole Construction. (RUS Bulletin 345-151)

Dated: _____

☐ RUS Form 515d - Specifications and Drawings for Underground Cable Installation. (RUS Bulletin 345-152)

Dated: _____

☐ RUS Form 515f - Specifications and Drawings for Construction of Pole Line and Aerial Cables. (RUS Bulletin 345-153)

Dated: _____

☐ RUS Form 515g - Specifications and Drawings for Service Entrance and Station Protector Installations. (RUS Bulletin 345-154)

Dated: _____

The following RUS Standards are applicable: (Engineer to insert date)

PC - 2 Dated: 2-95

PC - 4 Dated: _____

PC - 5a Dated: _____

ATTACHMENT C**OWNER FURNISHED MATERIALS**

The owner will furnish all of the following items:

- 1) Fiber Cable (including marker ribbon for direct buried ("M"))
- 2) Copper Cable
- 3) Pedestals (including stakes and pole mount kits)
- 4) Cable Warning Signs (including warning posts for fiber)
- 5) Ground Rods (including rod clamps (BM2) and split bolt connectors (BM2A))
- 6) Ground Wire Connectors (pedestal mount ALP 387)
- 7) Ground Wire (bare and insulated)
- 8) 1½" Innerduct with pull ropes
- 9) Innerduct couplers
- 10) Stub Poles
- 11) Fiber Splices Cases (including material to fusion splice)
- 12) Handholes
- 13) Scotchloks for copper splicing

The owner will furnish a list of local contractors or suppliers of the following:

- 1) Asphalt
- 2) Gravel
- 3) Water
- 4) Contacts for disposal of dirt and rock

ATTACHMENT J

SCHEDULE OF ACCEPTANCE TESTS AND MEASUREMENTS

Description of Test or Measurement	Test or Measurement			Participants		
	Subscriber Loop Plant		Trunk Plant	Owner	Engineer	Contractor
	Dist. Pairs	Feeder Pairs and Fibers				
Shield Continuity	X	X	X	P		P
Conductor Continuity	X*	X	X	P		P
Conductor Insulation Resistance	X*	X	X	P		P
DC Loop Resistance						
DC Loop Resistance Unbalance						
VF Insertion Loss						
Line Noise						
Loop Measurements (Loop Checking)						
Two-Man Structural Return Loss			NA			
One-Man Open Circuit Measurements						
Loop and Station Tests			NA			
Paystation Line Tests			NA			
Cable Insertion Loss at Carrier Frequencies						
Shield Ground for Single Jacketed Cables	X	X	X	P		P
Fiber-OTDR Test		X		P		P
C. O. Ground Measurement				P		P

Engineer to check ☒ optional tests to be made.

X - These are standard tests and measurements required on facilities as designated by the Engineer, constructed or installed under this contract.

NA - Not Applicable

* - These test will not be required on distribution pairs not cross-connected to feeder pairs at time of acceptance testing.

P - Indicates participation in conducting acceptance tests and measurements.

ATTACHMENT K

**CONSTRUCTION SHEETS NOT FURNISHED
(NOT APPLICABLE FOR THIS CONTRACT)**

ATTACHMENT D

**CONTRACTOR FURNISHED MATERIAL
(NOT APPLICABLE FOR THIS CONTRACT)**

DISK : IL647C

FILE : GlasfordBidSheet

DATE: 01/24/01

**GLASFORD TELEPHONE COMPANY
PROPOSED NODE FIBER FACILITY
OSP CONTRACT NUMBER : IL647-2001-01**

ATTACHMENT E[illegible]

§
ATTACHMENT F
Page 1 of 2

BIDDER INSTRUCTION MODIFICATIONS

The following changes are applicable to the standard Form 515A:

On Page 2, add the following type BD pedestal to the list of units:

FO – Fiber Optic Splice Cabinet

On Page 4 and Page 6, change the BFC and BFO unit descriptions as follows:

Consists of one (1) foot of buried cable or fiber in place.

On Page 5, change the BFC unit suffix "P" description as follows:

Predesignated buried filled cable and innerducts are to be placed by the directional boring method where feasible.

On Page 7, add the following to the BFO descriptions:

Suffix

M

Description

Orange marking tape, 8 mil thick, 3 inch width, stamped:
CAUTION: FIBER OPTIC CABLE BURIED BELOW, placed simultaneously in the same plow slot or trench with cable(s). The warning tape is to be 18 inches below ground surface.

V()

One or more Vacant 1 1/4" tube(s) (innerduct(s)) placed simultaneously in the same construction corridor with the buried copper cable. Number of tubes required will be indicated in the parentheses. Contractor to be compensated for this unit related to the amount of copper cable placed.

I

Buried fiber cable to be placed (inserted, blown, pulled, etc.) Inside an existing vacant 1 1/4" tube (innerduct). Contractor to be compensated for this unit by the amount of fiber placed.

On Page 6 and 8, add the following to the BFC and BFO description, Paragraph A (3):

Note 3: Wire fences shall be repaired by means of suitable compression sleeves.

Note 4: Mailboxes and road signs shall be removed and reset to maintain continuous straight line plowing.

On Page 10, change the following BM description:

BM2 (5/8)(8) - Consists of the necessary labor and material for the installation of a 5/8" X 8' ground rod, ground rod clamp, and the required length of a bare #6 AWG copper ground wire (placed at a depth of 12 inches) and connected to an auxiliary grounding connector, (ALP387), within the housing.

ATTACHMENT F**Page 2 of 2**

On Page 11, change the following BM descriptions:

BM2A - Consists of the necessary labor and material for the installation of the required length of a bare #6 AWG copper ground wire attached from the grounding connector of a buried plant housing to a vertical pole ground located on a power pole no more than 6 feet from the buried plant housing. This unit also includes the connection of the ground wire within the buried plant housing to the grounding connector and the connection of the ground wire to the vertical pole ground with a grounding connector, compression type. Where the housing is not attached to the power pole, the ground wire shall be buried to a depth of 12 inches.

On Page 11, add the following BM53 description:

BM53F - Warning Sign Assembly Unit - Consists of one utility warning marker, furnished by the owner, in place, as shown on the special guide drawings. This unit includes all labor and material to install the marker. Suffix F designates the sign is for fiber cable.

On Page 12, add the following to the BM60 and BM61 description:

The depth of the hole below the surface of the ground shall be limited to a depth of eight (8) feet or less, except where shown otherwise on the construction drawings.

BM60- (1.25) I - Denotes an underground pipe crossing using a 1 1/4" Innerduct.

On Page 12, add the following to the BM62 description:

BM62 - Underground Non-Pipe Crossing Assembly Unit - Consists of the labor to provide a hole in soil one (1) foot in length by the directional bore method only, not to exceed 3 inches in diameter, for accommodating cables therein. Contractor to be compensated for cable(s) under their appropriate assembly unit designations.

BM63 - Underground Non-Pipe Crossing Assembly Unit - Consists of the labor to provide a hole in soil one (1) foot in length, that exceeds 3 inches but not 6 inches in diameter, for accommodating cable(s) therein. Contractor to be compensated for cable(s) under their appropriate assembly unit designations.

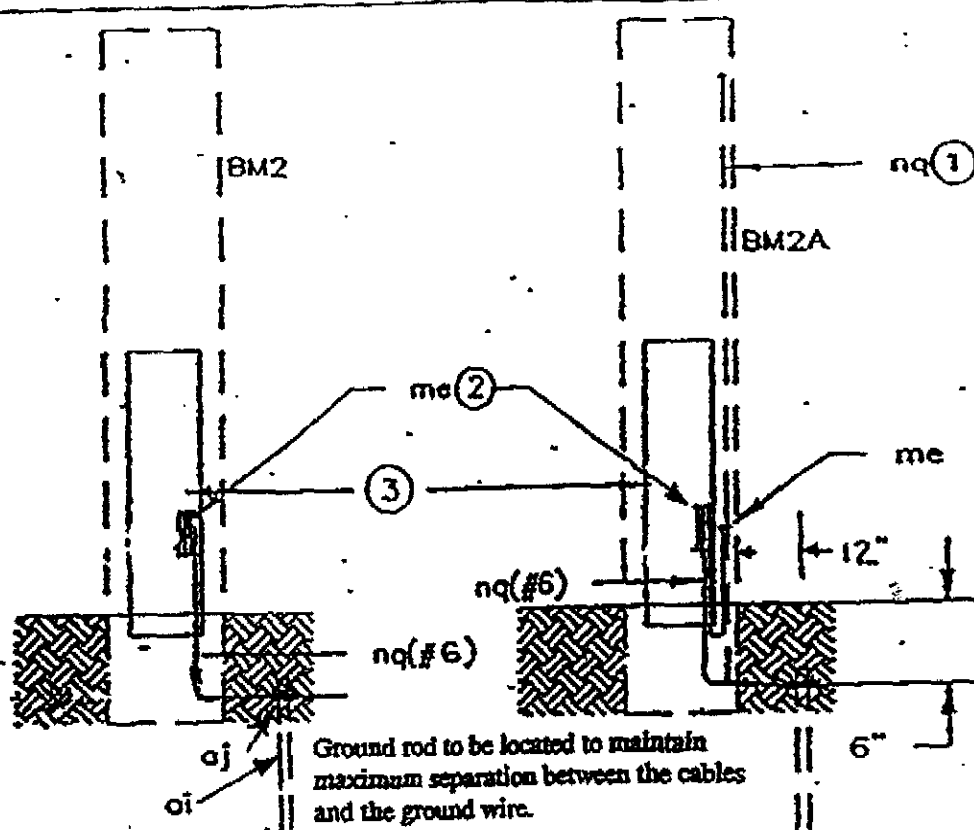
ATTACHMENT G

UNITS	DESCRIPTION
WBC	<p><u>Buried Cable Rearrangement Unit -</u> Consists of the necessary labor required to expose and lower up to ten feet of existing working cable(s) within the construction corridor or to remove and replace up to ten feet of laterals at existing pedestal locations to obtain the required depth for the new cables(s). This unit shall include the labor to reinstall the existing grounding connector, bonding connectors, and harnesses within the existing pedestal. The Contractor will be compensated for this unit in ten (10) foot increments.</p>
WBD	<p><u>Buried Plant Pedestal Rearrangement Unit -</u> Consists of the necessary labor and material for supporting new and existing working cable(s) and /or service wire(s) in an existing buried plant housing. This unit shall include the installation of bonding connectors and harnesses on new and existing cable(s) and/or service wire(s) in accordance with RUS splicing standard PC-2, and also the addition of rodent proofing (pea gravel) inside the existing housing. Also included is the inspection of the housing to determine if a ground rod (BM2) or connection to a power ground (BM2A) is present. The installation of the appropriate ground unit, as required, will be compensated for under the BM grounding unit. The Contractor will be compensated for this unit on a per housing basis.</p>
WHC-1	<p><u>Cable/Wire Splicing Rearrangement Unit -</u> Consists of the necessary labor and materials to cut and re-splice existing working cable(s), service wire(s) and/or non-working service wire(s), where at the direction of the Engineer, the existing cable(s) and/or service wire(s) are removed and replaced (WBC unit) from the existing buried plant housings or existing working and/or non-working service wire(s) are removed and transferred (WSEB unit) into a new housing (BD unit). The Contractor will be compensated for this unit on a per pair basis.</p>
WSEB	<p><u>Service Entrance Rearrangement Unit -</u> Consists of the necessary labor and materials to transfer existing working and/or non-working service entrance(s) into a new buried plant housing (BD unit) and placing the required length of a temporary jumper cable (SEB2-22) between the old and new housings. The BD unit covers all requirements in accordance with RUS splicing standard PC-2 for installation of the drop within the housing. The Contractor will be compensated for this unit on a per drop basis.</p>
WUH-1	<p><u>Handhole Rearrangement Unit -</u> Consists of the necessary labor to expose an existing handhole for placement of new fiber optic cable. This unit also includes backfilling, tamping, etc. to restore the excavation site back to its original condition.</p>

ATTACHMENT H**LIST OF SPECIAL ASSEMBLY UNIT DRAWINGS
AND SPECIAL GUIDE DRAWINGS**

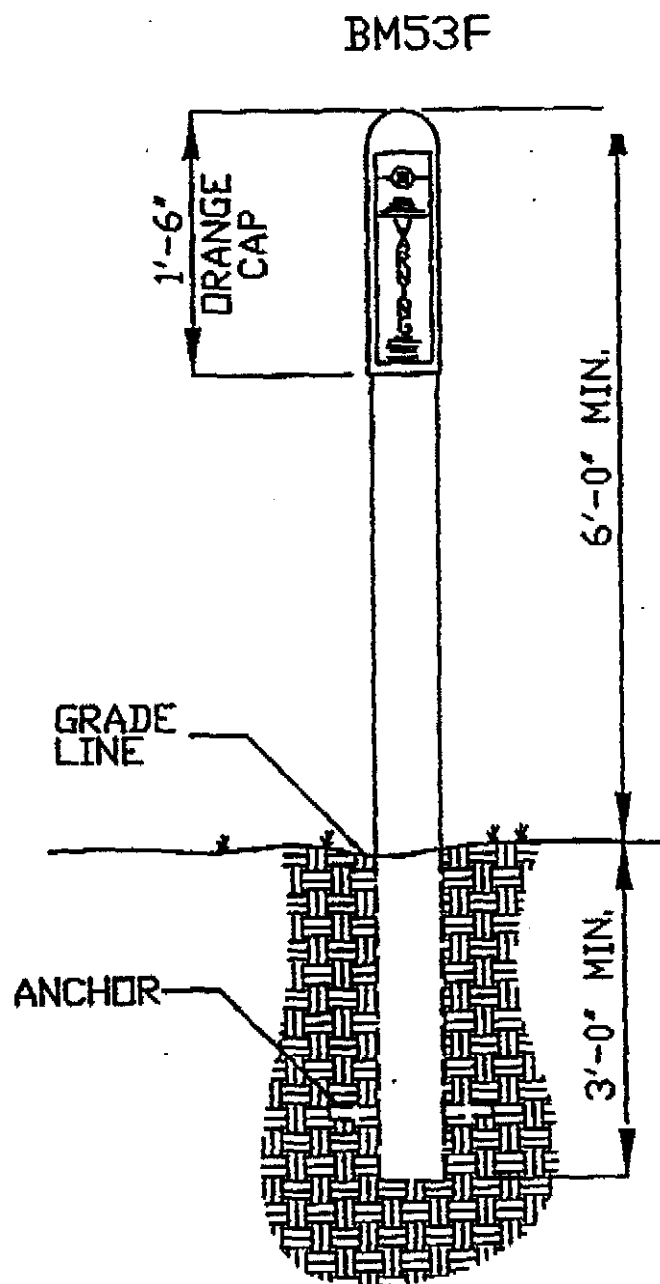
(NOTE: Engineer will indicate by listing below the special assembly unit drawings and special guide drawings which have been prepared. These drawings are considered to be a part of this Contract.)

<u>Drawing</u>	<u>Page</u>
BM2-BM2A	H1
BM53F	H2
BM53, BM54, BM55	H3
902-A	H4
910	H5
975	H6
976	H7
991	H8
WSEB	H9
UHGRD4	H10

**Notes:**

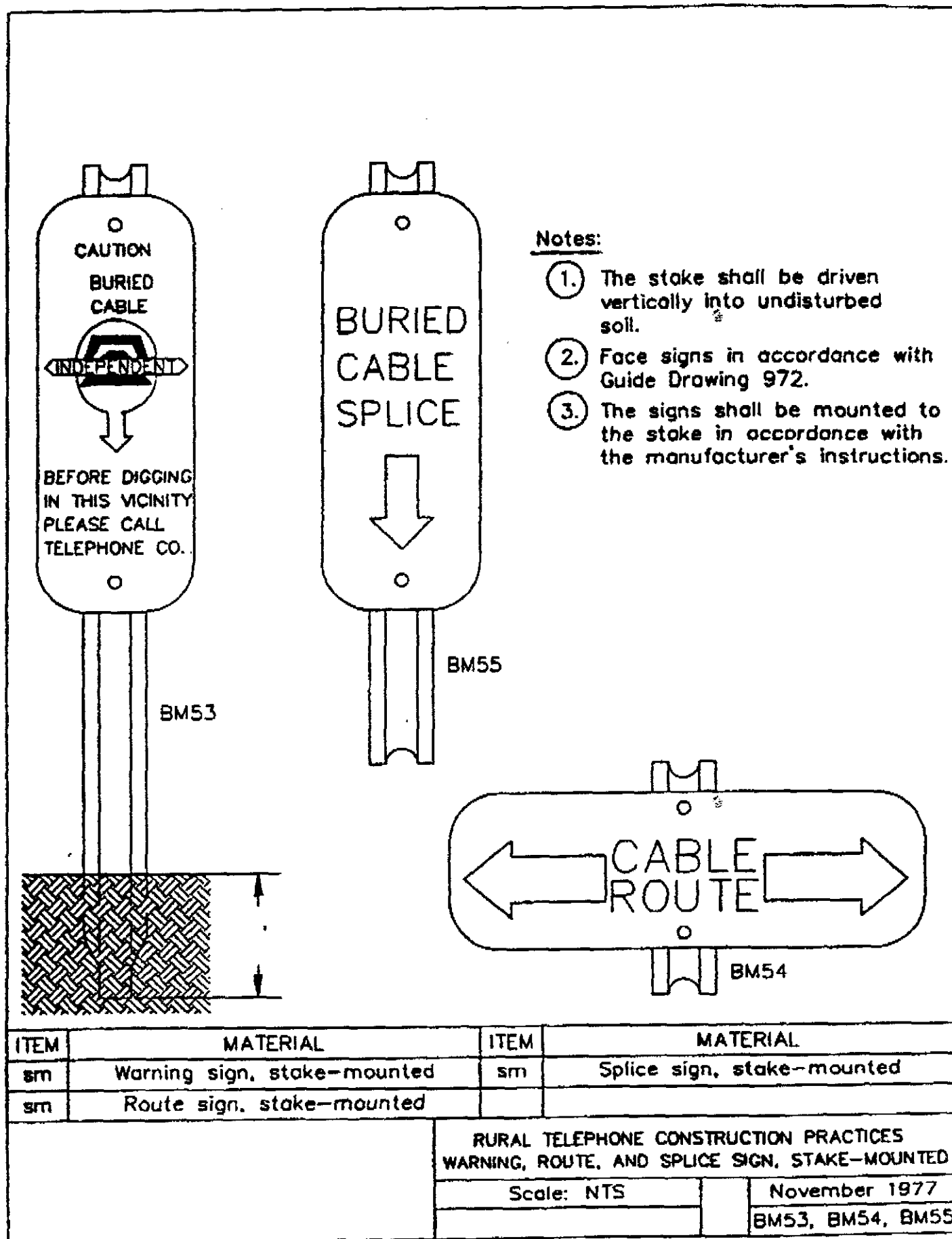
- ① A bare #6 AWG ground wire shall be connected to vertical pole ground wire of multigrounded power system neutral or pole ground assembly (PM2). If a multigrounded power system neutral is present on the pole but there is no vertical pole ground wire, sufficient length of #6 AWG copper ground wire shall be left coiled and taped to permit it to be extended up the pole and connected to the multigrounded neutral by a representative of the power company.
- ② The use of an auxiliary grounding connector, when required, shall be field installed within the housing in accordance with the housing manufacturer's instructions.
- ③ The bonding bracket shall be installed in accordance with the housing manufacturer's instructions.

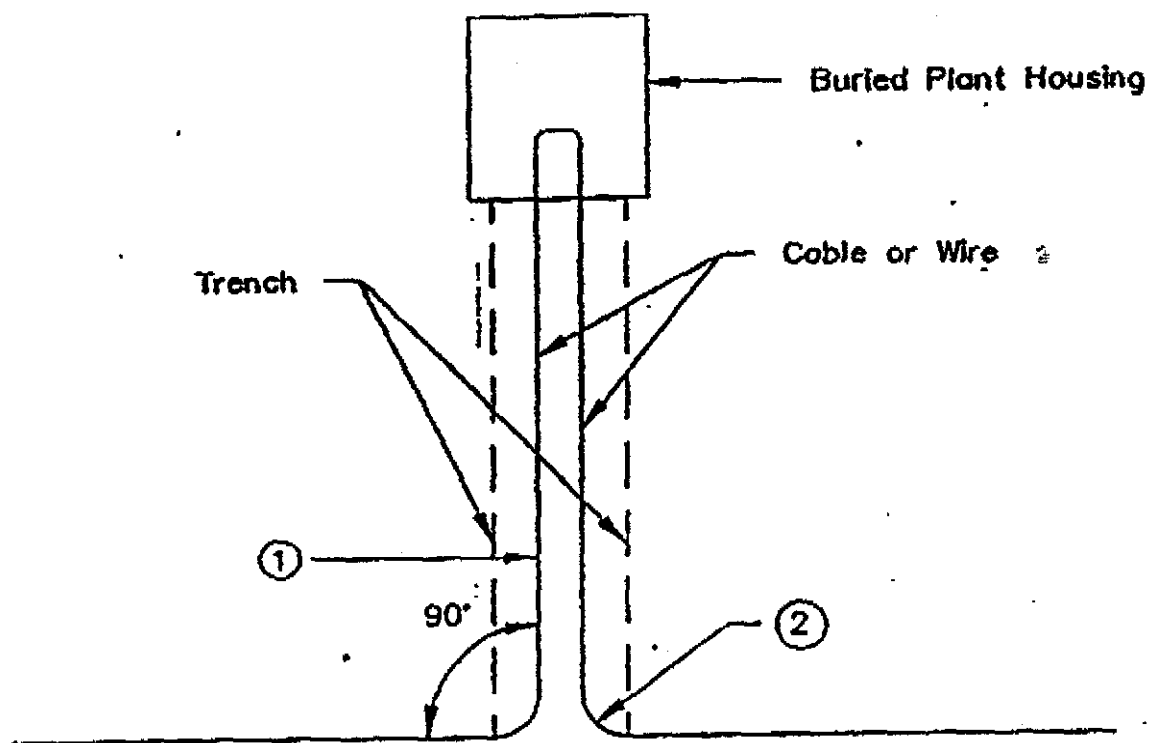
ITEM	MATERIAL	REQ'D	ITEM	MATERIAL	REQ'D
nq	Wire, ground, bare #6 AWG	as req'd	nq	Wire, ground, bare #6 AWG	as req'd
	tinued copper				
oi	Rod, ground (size & length as req'd)	1			
me	Connector, ground	2			
oj	Clamp, ground rod	1			
RURAL TELEPHONE CONSTRUCTION PRACTICES					
GROUND WIRE ASSEMBLY, BURIED PLANT					
Scale: NTS				January 1988	
				BM2 — BM2A	



RURAL TELEPHONE
CONSTRUCTION PRACTICES

DRAWN BY: C.S. WILSON	APP. BY:
DISK:	DATE: 1/3/96
FILE: C:\AHARPE\BHS3	BHS3



Notes:

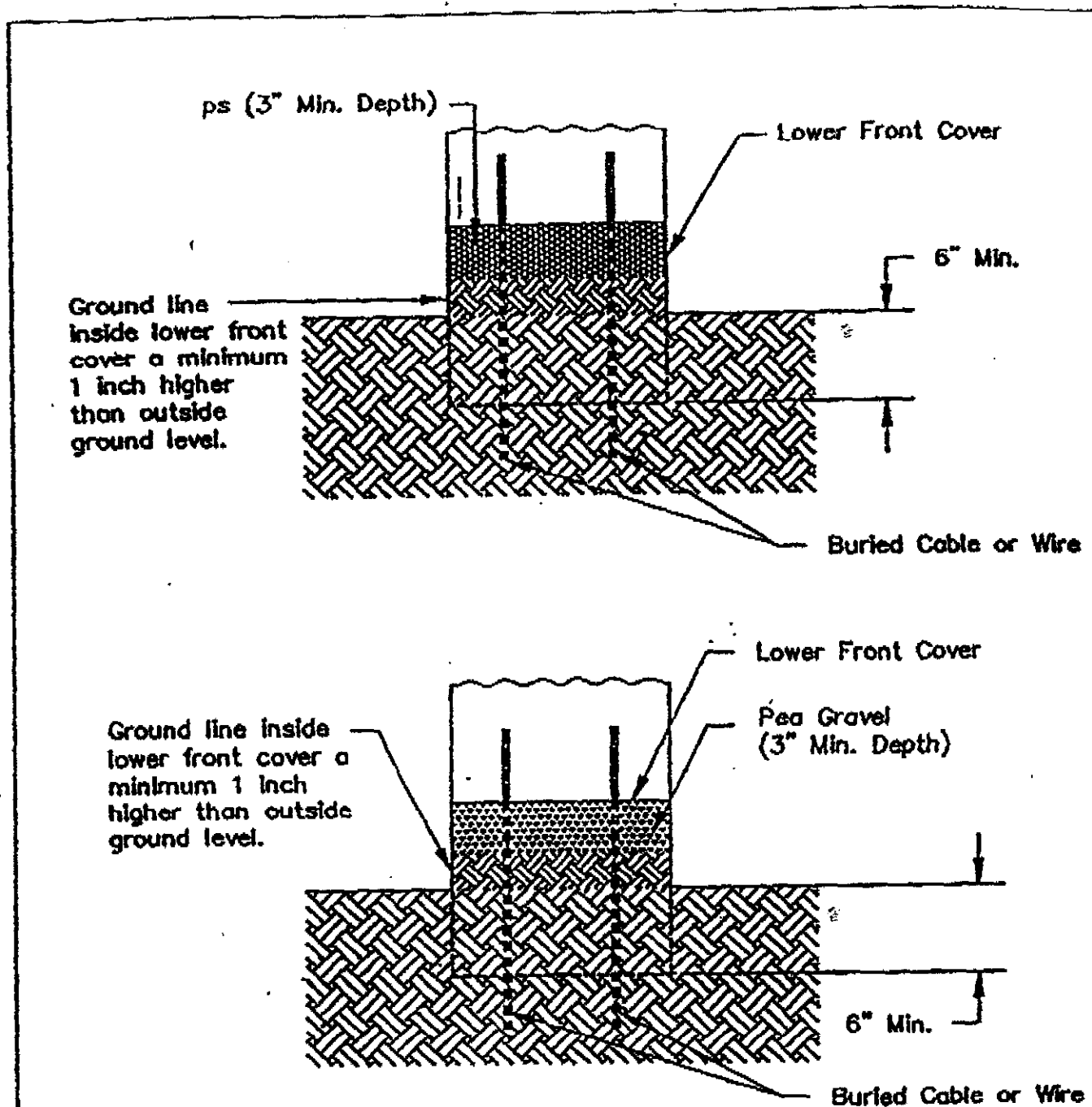
- ① The in and out laterals to the buried plant housings shall be located in the same trench.
- ② The radius of bend of the cable or wire shall not be less than 10 times the diameter of the cable or wire.

RURAL TELEPHONE CONSTRUCTION PRACTICES
LATERAL RUNS TO BURIED PLANT HOUSINGS

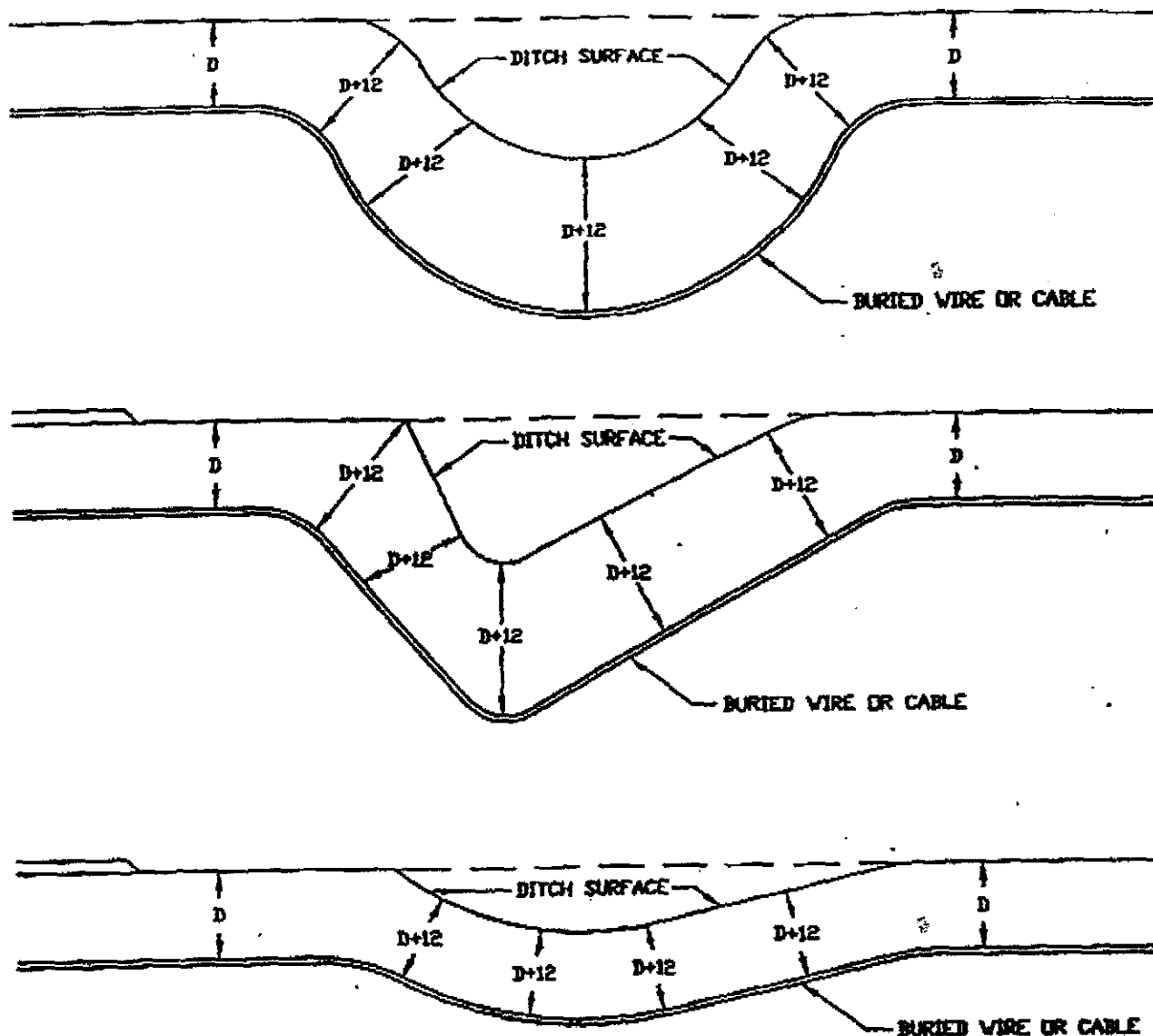
Scale: NTS

September 1982

902-A



ITEM	MATERIAL	NUMBER REQUIRED
ps	Sealer, housing	As required
-	Gravel, pea	As required
		RURAL TELEPHONE CONSTRUCTION PRACTICES RODENT PROTECTION FOR BURIED PLANT HOUSINGS
		Scale: NTS
		January 1988
		910



Note: Buried wire and/or cable shall be placed as shown above.

D = Specified cable depth for any cable per contract.

D+12 = Depth required to cross ditches for any cable per contract.

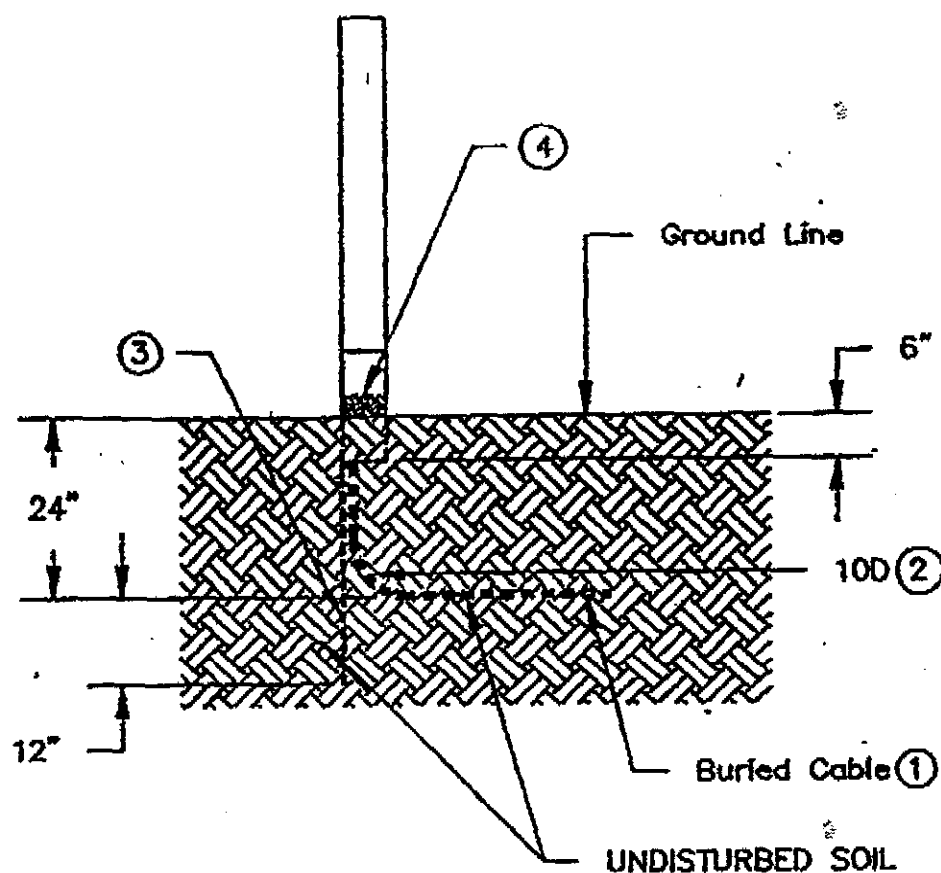
RURAL TELEPHONE CONSTRUCTION PRACTICES
BURIED PLANT UNDER DITCHES

SCALE: NTS

DSK FILE: RFB00K\WYDCROA DICHROS

JANUARY 1985

976

Notes:

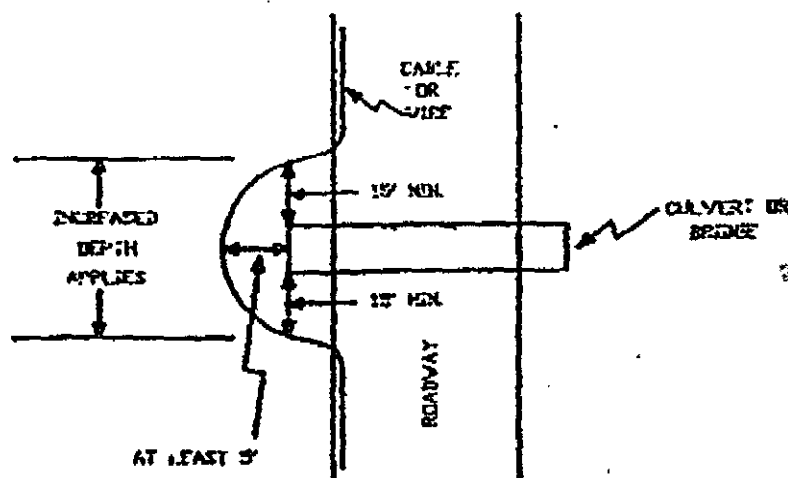
- ① Place cable on undisturbed soil at bottom of trench.
- ② The radius of bend of the cable at the base of the housing should not be less than 10 times the diameter of the cable and wire.
- ③ The stake of the housing shall be driven into undisturbed soil to a depth of approximately 12 inches.
- ④ The ground level inside the ground line cover plate should not be less than 1-inch above the outside ground level.

RURAL TELEPHONE CONSTRUCTION PRACTICES
HOUSING INSTALLATION DETAILS

Scale: NTS

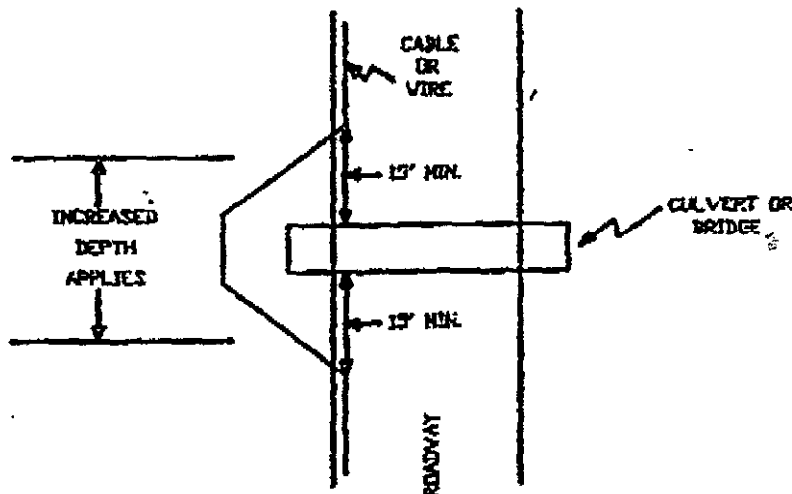
January 1988

976



Method #1: FIRST CHOICE TO BE USED WHEN OBSTRUCTIONS AND TERRAIN CONDITIONS PERMIT.

*If terrain conditions are suitable, the cable or wire may be plowed around the culvert to a minimum depth of . If plowing to a depth of is not practicable, the cable or wire shall be trenched in place to a minimum depth of



Method #2: SECOND CHOICE TO BE USED WHEN METHOD #1 IS NOT FEASIBLE.

*The cable or wire located within 15 feet of the culvert shall be placed to a minimum depth of . There is no requirement for separation between the cable or wire and the end of the culvert or bridge.

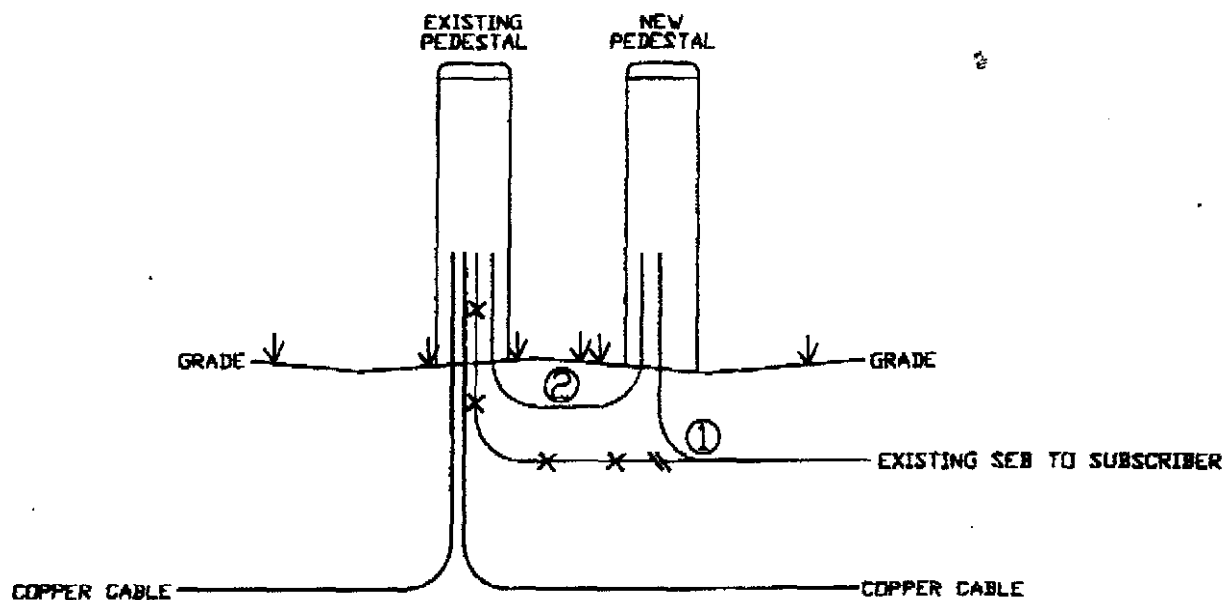
This drawing is intended to show the method of placing plant around bridges or culverts.

RURAL TELEPHONE CONSTRUCTION PRACTICES
ROUTING BURIED PLANT AROUND CULVERTS

SCALE: NTS

May 11, 1988

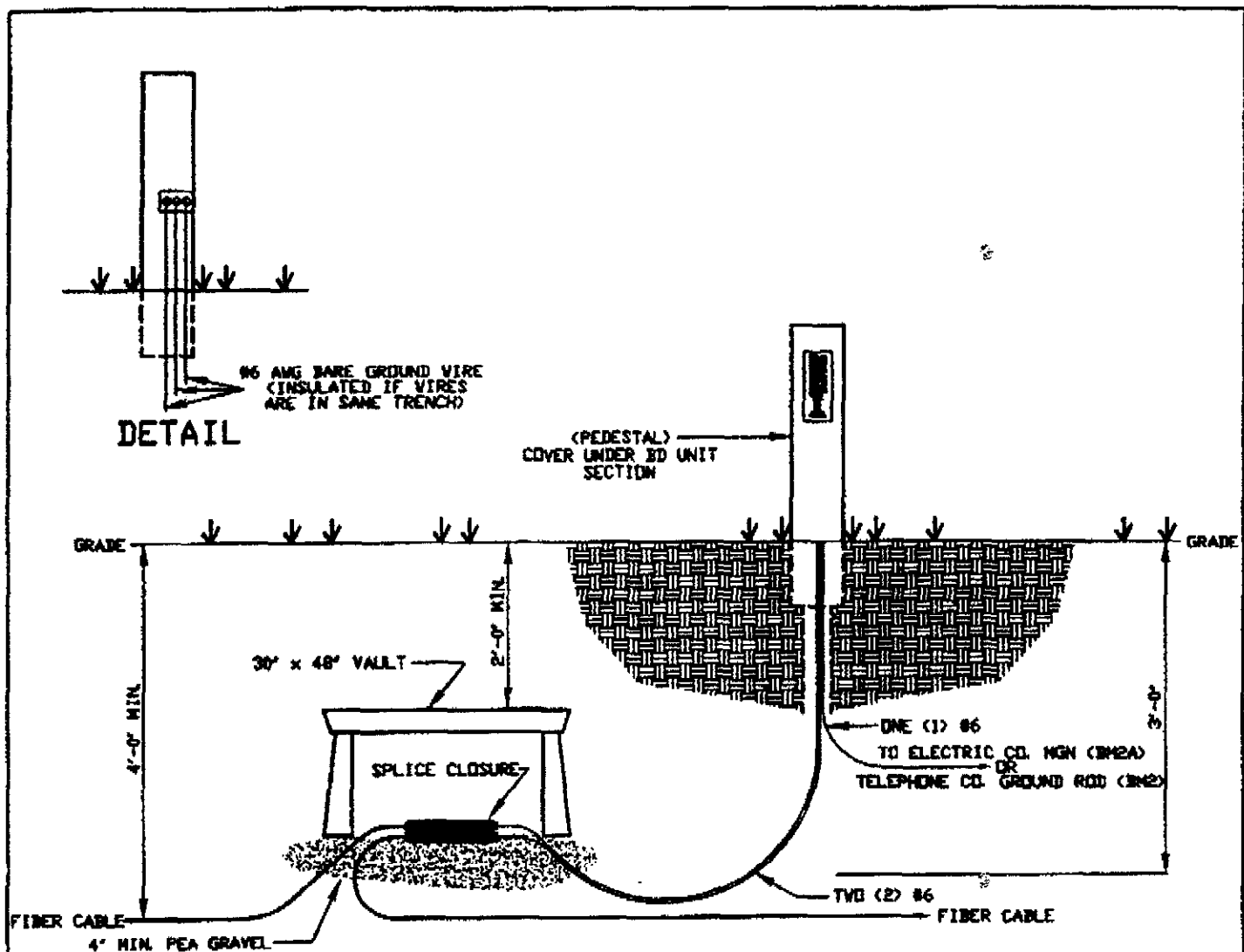
991

**NOTES:**

1. REMOVE EXISTING SEB FROM EXISTING PEDESTAL AND DIG OVER TO NEW PEDESTAL.
2. USE A PIECE OF DROP OR INO WIRE TO JUMPER BETWEEN PEDESTALS TO MAINTAIN SERVICE TO THE SUBSCRIBER.

RURAL TELEPHONE
CONSTRUCTION PRACTICES
WSEB INSTALLATION

DRAWN BY: C.S. WILSON	DATE: 4-18-00
FILE: OWO-CENTURY\WSEB\ING	WSEB



NOTE: IN THE PEDESTAL, USE DIRECTIONAL
TIES ON EACH #6 AWG
TO DESIGNATE THE FOLLOWING:
(A) #6 FROM SHIELD TO C.O. (TIE PLUS DIRECTIONAL TIE)
(B) #6 FROM SHIELD TO FIELD (1 DIRECTIONAL TIE)

ITEM	MATERIAL	REQ'D	ITEM	MATERIAL	REQ'D
np	#6 AWG tinned braid with 3' eyelets or #6 AWG stranded bonding harness	as req'd	nw	Shield Connector	2
nq	Wire, ground, bare or insulated #6 AWG	as req'd	nl	Compression Lugs	3
ties	Directional Markers	as req'd	br	Ground Bracket Extensions	1

DIRECTIONAL MARKER CODE

BLUE = CENTRAL OFFICE
ORANGE = NORTH
GREEN = EAST
BROWN = SOUTH
SLATE = WEST

RURAL TELEPHONE CONSTRUCTION PRACTICES UH-HANDHOLE INSTALLATION AND GROUNDING

DRAWN BY: C. S. WILSON	APP. BY: HSF
DISK:	DATE: 4-28-95
FILE: 07PILMITTEVINGRM.BIG	UNGRD4